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1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

The United States (U.S.) is experiencing wide spread illegal drug use and increasing frequency of drug-related crime. Negative impacts of widespread drug use on society continue to affect the work force, educational and medical systems, general law and order, and traditional family values and structure. As a result of these high levels of drug-related crime, the continued damage to our Nation's health and economy, and strains on vital relationships with international allies, the White House Office of National Drug Control Policy developed the National Drug Control Strategy (NDCS) and incorporated the Department of Defense (DoD) in the new strategy. The Secretary of Defense established Joint Task Force Six (JTF-6) in November 1989 to coordinate with all DoD counter-drug support to Federal, State, and local drug law enforcement agencies (DLEAs) in an effort to curtail drug-related activities throughout the U.S. and protect National security. As a DoD component, JTF-6 was assigned to assist DLEAs that have drug interdiction responsibilities in the continental U.S. by providing general, operational, and engineering efforts, provided the mission has a nexus to drug interdiction. In addition, this assistance would provide all or part of the Mission-Essential Task List (METL) for the military unit involved. The METL allows for a unit to receive required training in real world activities prior to deployment.

JTF-6 received a support request through Operation Alliance, from Oklahoma's Council on Law Enforcement Education and Training (CLEET), to assist in the construction of a law enforcement training facility to be used by DLEAs in the region to help train their personnel in tactics to combat illegal drug trafficking and other uses. At present, CLEET does not have a driver training track, firing range, or gymnasium, and shares other facilities with the Oklahoma Highway Patrol. The proposed law enforcement training facility would be constructed within a 356-acre parcel of land recently acquired by CLEET. This facility will enable trainees to develop skills necessary to fully function as law enforcement officers, including the skills to correctly combat illegal drug trafficking. The proposed site is currently vacant, having been previously either undisturbed or used for rangeland.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended. The EA addresses site-specific impacts associated with the proposed deployment of military units that would construct a portion of the law enforcement training facility in Ada, Pontotoc County, Oklahoma. Military engineers will be used to construct the initial phase of the Proposed Action. For subsequent phases, private contractors would be utilized to provide services. Appropriate NEPA and decision documents are prepared according to guidelines provided by Army Regulation (AR) 200-2 as soon as details of the proposed action are available. Figure 1-1 provides an overview map of the law enforcement training facility area and surrounding property. Figure 1-2 presents the proposed layout of the facility.

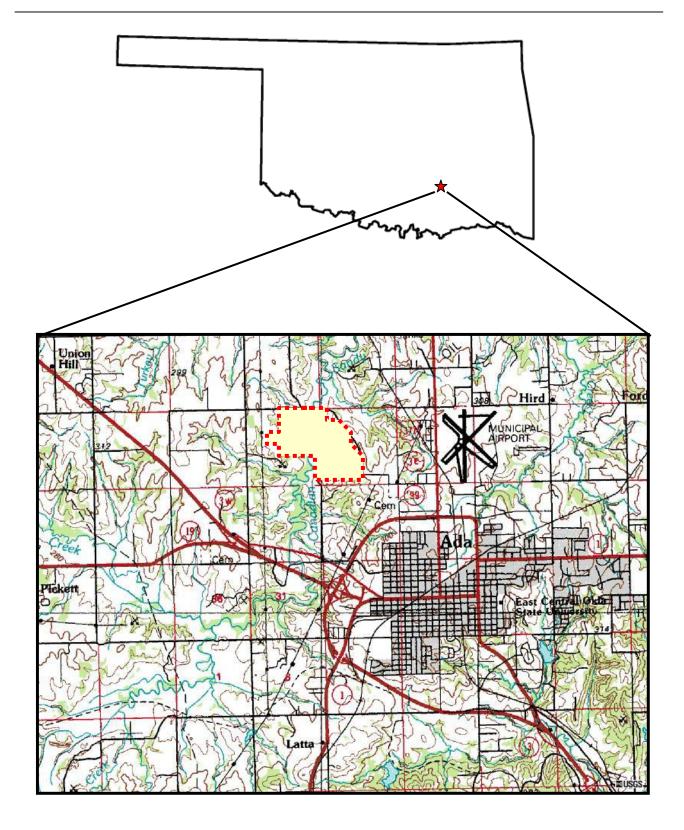


FIGURE 1-1 PROPOSED LOCATION OF TRAINING FACILITY

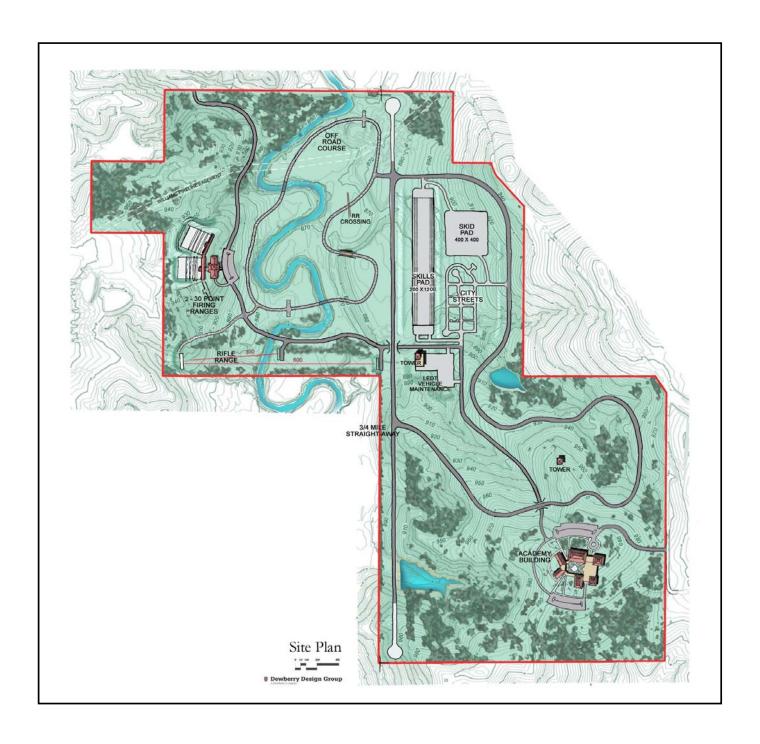


FIGURE 1-2 PROPOSED LAYOUT OF TRAINING FACILITY

1.2 LOCATION OF PROPOSED ACTION

The proposed project site is located in Pontotoc County, in the northwest portion of the city of Ada, Oklahoma. It is situated approximately two miles northwest of downtown Ada, near the Rosedale Cemetery on Egypt Road.

1.3 PURPOSE AND NEED

The purpose of the Proposed Action and Alternatives is to provide training to DLEAs that work to decrease or eliminate illegal contraband (i.e. drugs, weapons, vehicles) from being transported through the area and to reduce associated crime. The goal of the proposed project is to maximize the effectiveness of local and state DLEAs, specifically the Council on Law Enforcement Education and Training (CLEET), in their deterrent efforts and law enforcement in general. The Proposed Action involves assisting in the construction of the law enforcement training facility.

CLEET was created by statute in June 1963. From its inception to 1988, CLEET's focus was entirely peace officer training. In 1988, CLEET was given responsibility for state-wide continuing education programs, private security licensing, and regulation functions. At present, CLEET is responsible for providing basic peace officer training to over 400 public municipal police departments, all 77 county sheriff offices, and all state law enforcement agencies in Oklahoma except the Oklahoma Highway Patrol and Department of Corrections. During 2001, CLEET graduated 451 officers, plus 48 officers who were returning to the law enforcement field after an absence of greater than five years.

The proposed facility would include CLEET statewide headquarters and a training facility designed to encompass all aspects of law enforcement training. Current training facilities are inadequate, and do not include a driver training track, firing range, or gymnasium. Further, these training facilities are shared with the Oklahoma Highway Patrol, and existing classroom and administrative office space is not sufficient to house both agencies.

Information on drug-related crime reported in the state of Oklahoma was compiled by the Oklahoma Department of Corrections (2002) and is provided in Table 1-1. The number of drug interceptions in the state has increased steadily in the past 20 years, although the overall crime index has remained fairly constant.

A secondary, but extremely important, objective for the DoD is to provide training opportunities for Active, Reserve, and National Guard units in deployment and redeployment, logistics and design planning, construction, and other requirements of each participating unit's METL. These activities are meant to increase and improve the real world readiness of the units in the event of a National emergency.

JTF-6 provides support to a DLEA only after a request for its support has been made, and only for those projects which have illegal drug control purposes. The Posse Comitatus Act (18 USC 1385) prohibits the use of Federal Active and Reserve armed services personnel from conducting police actions (i.e., search and seizure, arrest, detention, investigation, etc). Consequently, the

support provided to a DLEA involves activities that do not require the troops' direct involvement in arrests and convictions. Although many of the projects are conducted in areas that pose a security threat to military units, JTF-6 relies on the DLEA to provide security for the military personnel at all times. This area is not currently considered to be a security threat.

of Inceptions 2,400 2,107 ^{2,143} 2,100 1,800 ,607 1,500 1.470 1.304 1,200 1.078

TABLE 1-1 OKLAHOMA DEPARTMENT OF CORRECTIONS DRUG INTERCEPTIONS BY YEAR FROM FY 1980 TO FY 2001

SOURCE: U.S. CENSUS BUREAU 2000

1.4 ORGANIZATION OF THE DOCUMENT

Chapter 1.0 of this EA contains the background and location of the Proposed Action, along with the purpose and need, and any regulations and statutes associated with the Proposed Action. Chapter 2.0 gives a detailed analysis of the Proposed Action and all reasonable alternatives, including the No-Action and those that were considered but eliminated from detailed analysis. Chapter 3.0 describes the baseline environment conditions against which the impacts of the Proposed Action and alternatives are evaluated. These environmental conditions include information on soils, air quality, land use, hydrology, biological resources, noise, cultural resources, and the current socioeconomic conditions of the area. Chapter 4.0 describes the environmental consequences of the Proposed Action and alternatives. Chapter 5.0 presents

environmental design measures. Chapter 6.0 describes the public involvement for this project. Chapter 7.0 lists the persons involved in the preparation of this document. Chapter 8.0 presents references cited and Chapter 9.0 includes a list of acronyms and abbreviations. Appendices included in this document are: (A) Site Photographs; (B) Threatened and Endangered Species Information; (C) Consultation and Response Letters; (D) Public Notice; and (E) Storm Water Pollution Prevention Plan (SWPPP).

1.5 APPLICABLE ENVIRONMENTAL STATUTES AND REGULATIONS

This EA was prepared pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ) [40 Code of Federal Regulations (CFR) Parts 1500-1508]. This EA should provide sufficient evidence and analysis to determine whether to prepare a Notice of Intent (NOI) for an Environmental Impact Statement or a Finding of No Significant Impact (FONSI) (40 CFR 1508.9). Additionally, this EA complies with Army Regulation (AR) 200-2, Environmental Effects of Army Actions (December 23, 1988) and AR 200-4, Cultural Resources Management (October 20, 1997). Brief summaries of the Federal and State laws, regulations, Executive Orders (EO), and other entitlements that may be applicable to the proposed project are provided in the following sections.

1.5.1 National Environmental Policy Act

NEPA (42 United States Code [USC] 4321 et seq.), as implemented by the regulations promulgated by the President's CEQ (40 CFR Parts 1500-1508), establishes national policy, sets goals, and provides the means to prevent or eliminate damage to the environment. The principal objectives of NEPA are to ensure the careful consideration of environmental aspects of proposed actions in Federal decision-making processes and to look at the alternatives that may provide a more environmentally acceptable solution. Additionally, NEPA ensures that environmental information is made available to decision makers and the public before decisions are made and actions taken.

1.5.2 Executive Order 11514, Protection and Enhancement of Environmental Quality

EO 11514, Protection and Enhancement of Environmental Quality, as amended by EO 11991, sets the policy for directing the Federal government in providing leadership in protecting and enhancing the quality of the nation's environment.

1.5.3 Executive Order 12898, Environmental Justice

The purpose of EO 12898 is to prevent the disproportionate placement of adverse environmental, economic, social, or health impacts from proposed Federal actions and policies on minority and low-income populations.

1.5.4 Executive Order 13007, Sacred Sites

The purpose of EO 13007 is to ensure that each executive branch agency with statutory or administrative responsibility for the management of Federal lands shall, as appropriate, promptly implement procedures for the purposes of (1) accommodating access to and ceremonial use of Indian sacred sites by Indian religious practitioners and (2) avoiding adverse effects on the physical integrity of such sacred sites. Where appropriate, agencies shall also maintain the confidentiality of sacred sites.

1.5.5 Clean Air Act

The Clean Air Act amendment of 1990 established Federal air quality standards. Each action proposed by the Federal government under NEPA is evaluated regarding the status of air quality in relation to established national and state air quality standards in the vicinity of the Proposed Action.

1.5.6 Clean Water Act

The Clean Water Act (CWA) (33 USC 1251 et seq., as amended) establishes Federal limits, through the National Pollutant Discharge Elimination System, on the amounts of specific pollutants that may be discharged to surface waters in order to restore and maintain the chemical, physical, and biological integrity of the water. Section 404 of the CWA regulates the discharge of fill material into waters of the U.S. As the proposed project will disturb more than five acres, a SWPPP is included as Appendix E.

1.5.7 Endangered Species Act

The Endangered Species Act (16 USC 1531-1543) requires Federal agencies to determine the effects of their actions on endangered or threatened species of fish, wildlife, plants, and critical habitats, and to take steps to conserve and protect these species.

1.5.8 Cultural Resources Laws and Regulations

The National Historic Preservation Act (NHPA) of 1966 (16 USC 470 et seq., as amended) and its implementing regulation, 36 CFR Part 800, require Federal agencies to determine the effect of their actions on cultural resources, and to take certain steps to ensure these resources are located, identified, evaluated, and protected. The Archeological Resources Protection Act (16 USC 470a-11, as amended) protects archeological resources on Federal lands. If archeological resources that may be disturbed during site activities should be discovered, the NHPA would require permits for excavating and removing the resources.

1.5.9 Farmland Protection Policy Act

The Farmland Protection Policy Act (PL 97-98; 7 USC 4201 et seq.) requires identification of proposed actions that would affect any lands classified as prime and unique farmlands. Under

the Act, Federal programs which contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses will be minimized.

1.5.10 Other Laws and Regulations

Additional Federal and state regulations that may apply to the Proposed Action and alternatives are listed below:

- American Indian Religious Freedom Act of 1978
- Bald Eagle Protection Act (Public Law 90-535)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Public Law 96-510), as amended by the Superfund Amendments and Reauthorization Act (Public Law 99-499), 1986
- Federal Compliance with Pollution Control Standards
- Federal Facilities Compliance Act
- Fish and Wildlife Coordination Act, as amended, USC 661, et seq.
- Hazardous Material Transportation Act, 1975
- Migratory Bird Treaty Act
- Native American Graves Protection and Repatriation Act (NAGPRA) 25 USC 3001 et. seq.
- Resource Conservation and Recovery Act (Public Law 94-580), 1976
- Safe Drinking Water Act, 1974
- Solid Waste Disposal Act, 1980
- Toxic Substances Control Act (Public Law 94-469)
- Watershed Protection and Flood Prevention Act, 16 USC 1101, et seq.
- Wetlands Conservation Act (Public Law 101-23)

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This chapter describes the Proposed Action and all reasonable alternatives, including the No-Action Alternative. The Proposed Action would involve the construction of a law enforcement training facility located near the city of Ada, Oklahoma. Under the No-Action Alternative, the area would remain undeveloped, and no changes would take place. No other reasonable alternatives for DLEA requirements were identified or carried forward in the analysis.

2.1 PROPOSED ACTION

Under the Proposed Action, construction personnel under direction of JTF-6 supervisors and private contractors would construct a law enforcement training facility that would include an administration building, a classroom/training building, a support facility building, a kitchen/cafeteria, a dormitory, a firearms/driver training building, ranges/firearm ammunition storage space, a lobby or corridor for mechanical storage, a driver training course, and firing ranges.

Main Campus

The main campus building is expected to be an approximately 105,000 square foot, twostory structure that will house administrators, support staff, and instructor offices. The administrative portion of the facility, which would include a large reception area, would house full-time and reserve peace officer records, private security and private investigator records, and filing areas. The facility would accommodate approximately twelve general and/or subject-specific classrooms. One conference room would double as a courtroom where courtroom testimony classes would be conducted. Administrative hearings would also be conducted in this area. Classroom areas would include one room designed and furnished to accommodate criminal investigative training, and another classroom designed to allow students to use audio and visual contact with patrol practicum participants. Conference and meeting rooms, a multi-purpose room used for skills training, break areas, a cafeteria/dining area, a dormitory, and the site's mechanical plant would make up the final elements of the main campus.

Law Enforcement Driver Training Component

The driver training section would include a 2,500 square foot building with a three-car garage for maintenance and equipment storage, and a three-story control tower with a twostation dispatch center.

The vehicle training area would consist of a 1,500- by 200-foot concrete non-emergency skills pad, a 400- by 400-foot asphalt skid avoidance skills pad, a 12 block city street configuration, a 2.5 mile asphalt highway emergency response course, and a .75 mile rural road course constructed of a combination of dirt and gravel areas. The various types of streets/roadways/highways would be necessary due to the fact that CLEET trains county, municipal, and state law enforcement officers, all of whom drive on a variety of road surfaces.

Firearms Training Component

The firearms training section would include an 11,000 square foot, single-story structure with instructor offices, a classroom, weapons cleaning and storage areas, ammunition storage areas, and shooting decisions simulator rooms.

The primary range would consist of a fully protected and baffled 30-point 50 yard pistol range. Another 30-point stationary target outdoor pistol/shotgun range and a 10-point 300 yard rifle range would complement the primary range. All ranges would be utilized to train basic academy students, continuing education students, and firearms instructors.

Equipment to be used during construction activities may include integrated tool carriers, backhoes, front-end loaders, flat bed and concrete trucks, graders, water trucks, pneumatic hammers, drills, forklifts, and other building construction related equipment. Equipment and construction materials would be stored at a site in a previously disturbed area located within the boundaries of the law enforcement training facility.

Existing roads to the site would be utilized for transport of equipment and personnel. Through an environmental briefing, all personnel would be informed about the limits of the construction area and actions permitted within and outside of the area. Additionally, construction limits would be flagged to ensure that the proposed activities stay within the construction area boundaries.

Military engineering personnel and private contractors would implement all construction activities pertaining to the Proposed Action. If the military engineers and private contractors do not complete all activities during the initial phase of the proposed project, additional phases would be conducted at a later date. Under circumstances that would prevent the assigned battalion from participating in, or completing, the proposed project, another unit would be sought to provide this service.

2.2 NO-ACTION ALTERNATIVE

Under the No-Action Alternative, there would be no changes made to the existing project area. Although no significant adverse impacts would occur if implemented, the No-Action Alternative would not support the DLEA's efforts in effectively reducing drug trafficking and associated crime in the state of Oklahoma. CLEET would continue to use facilities that are inadequate for peace officer training. The associated drug-related crime would continue within the general area. Therefore, the No-Action Alternative may reduce the DLEA's ability to fulfill their mission.

2.3 ALTERNATIVE CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

2.3.1 Alternative Sites

An alternative to the Proposed Action would be that the proposed range site be moved to another location. A bid process began in August 2000 to select a site, and CLEET reviewed 16 bids from 15 cities. Upon reviewing an executive summary of each bid, CLEET Council members used an

evaluation sheet provided by the Department of Central Services to independently score each response. After tabulating the scores, six finalists were selected. Site visits were made to each of the finalist locations. Using consultation with an engineer from the Department of Central Services, the Council chose Ada, Oklahoma as the best site to use for the law enforcement training facility. The city of Ada was able to provide a minimum of 320 undivided acres of land at no cost to CLEET. Other competitive factors that were considered included available utilities, including water, electricity, sewer, natural gas, and communications; distance from the city to major highways by a two-lane paved road or better; the city's fire safety protection rating; the city's distance from the nearest law enforcement protection agency; and the distance from a medical facility and that facility's trauma rating. Another evaluation criterion centered around the cities' accessibility to educational facilities, with greater consideration being given to cities that were within 25 miles of a college or university.

2.3.2 Alternative Area Use

Another alternative to the Proposed Action would be to use the property for projects other than law enforcement training facility construction. The region would continue to have no available training area for CLEET and area DLEAs, and no advancements would be made in the efforts to combat the transportation of illegal contraband and associated crime in the area. Further, contracts with the City of Ada would be violated. Therefore, this alternative was eliminated from consideration.

3.0 AFFECTED ENVIRONMENT

The affected environment is the baseline against which potential impacts caused by the Proposed Action and alternatives are assessed. This chapter focuses on those resources specific to the proposed project area that have the potential to be affected by activities connected with construction of the law enforcement training facility

3.1 AIR RESOURCES

Air resources describe the existing concentrations of various pollutants and the climatic and meteorological conditions that influence the quality of the air. Precipitation, wind direction, wind speed, and atmospheric stability are factors that determine the extent of pollutant dispersion.

3.1.1 Climate and Meteorology

Climate in Ada, Oklahoma area is characterized by warm summers and mild winters, with precipitation falling mainly throughout the summer months. The average daily high for this area is 72.7°F, the average daily low is 49.6°F, and the average annual daily temperature is 61.1°F. This area receives an average of 41.3 inches of rain and 5.0 inches of snow per year. The annual wind speed averages 8.8 miles per hour (National Weather Service (NWS) 2002).

3.1.2 Air Quality

The Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ) implements both the state and Federal Clean Air Acts. A United States Environmental Protection Agency (USEPA)-approved State Implementation Plan (SIP) provides strategies and procedures for the daily operations of AQD. The nearest monitoring station to the project area is located in Oklahoma City, approximately 84 miles northwest of Ada. A small group of air pollutants, for which the USEPA has set National Ambient Air Quality Standards (NAAQS), are known as the "Criteria Pollutants." These 6 pollutants (ozone, sulfur dioxide, carbon monoxide, nitrogen dioxide, particulate matter, and lead) have been addressed throughout the country through a standard planning process and the concentrations of these pollutants in air have been extensively monitored and tracked for compliance with the air quality standards. Currently, the region of the proposed project is under **attainment status**. According to the USEPA (2002), pollutant levels exceeded the national standard on two occasions in Oklahoma City from 1996-2001.

3.2 LAND USE

The proposed site is currently undeveloped land with varying terrain and habitat. The eastern boundary is roughly represented by Egypt Road, and the entire site is surrounded by privately-owned land. Adjacent properties are generally large homesteads, including a horse farm located beyond the western boundaries of the property.

3.3 GEOLOGICAL RESOURCES

Geological resources include physical surface and subsurface features of the earth such as topography, geology, soils, and the seismic nature of the area. These features are discussed in the following sections.

3.3.1 Geology

The project area lies within the Central Lowland Physiographic Province of south-central Oklahoma. Erosional remnants of the Arbuckle Mountains form a rugged surface with as much as 600 feet of relief at certain points in the region. Limestone, dolomite, and sandstone interbed the various soil types on the site that differ in permeability throughout the site (U.S. Geological Survey [USGS] 1998).

3.3.2 Soils

According to the Soil Survey of Pontotoc County, Oklahoma (Natural Resources Conservation Service 1973), the major soil found within the proposed project area is of the Talpa series. These soils are very shallow, well-drained, and found on gently sloping to steep uplands. Limestone fragments constitute up to 30% of the top eight inches of soil. Below this point is hard limestone. Permeability of Talpa soils is moderate, and available water capacity is low.

Another less dominant soil type included in the Port series occurs along the flood plain of Sandy Creek. These soils are deep and well-drained, with moderately slow permeability and high available water capacity.

3.4 WATER RESOURCES

The following sections describe surface water and groundwater sources, water quality and quantity, and surface and subsurface water movement. The hydrological cycle results in the transport of water into various media such as the air, the ground surface, and subsurface. Natural and human-induced factors determine the quality of water resources.

3.4.1 Groundwater

Groundwater in this region is part of the Arbuckle-Simpson aquifer, which underlies an area of about 800 square miles in south-central Oklahoma (Figure 3-1). Theoretical available water storage from this aquifer is approximately 9 million acre-feet. The Arbuckle-Simpson aquifer is an important source of water for several towns in the area, and springs associated with the aquifer supply 100% of water used by the city of Ada (USGS 1998). Human activity may threaten critical ecosystems and springs affiliated with the aquifer, and historic over-pumping and drought have reduced spring discharge to zero on several occasions (USEPA 1995).

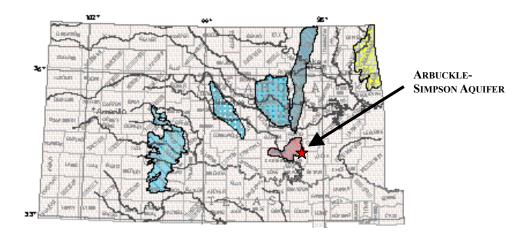


FIGURE 3-1 GROUNDWATER SOURCES IN OKLAHOMA

3.4.2 Surface Water

Sandy Creek runs north to south through the west-central section of the northern portion of the property. The creek flows approximately four miles before ending at the Canadian River. Several tributaries of the creek drain the property, some only during wet conditions. At least three permanent ponds exist on the property, all of which are included in the Sandy Creek system. One pond, located near the center of the property, appears in topographic maps from the 1970s, although its exact age is unknown. This pond was created by a beaver dam constructed of fallen trees and caulked with mud. Photos of the pond are included in Appendix A.

3.4.3 Water Quality

Water quality within the Arbuckle-Simpson aquifer is generally suitable for most uses. Freshwater is defined as having 1,000 dissolved solids concentration in milligrams per liter (mg/L). Slightly saline water, by definition, has levels between 1,000 and 3,000 mg/L. Groundwater in Pontotoc County typically is characterized as freshwater, with dissolved solid concentrations rarely exceeding 500 mg/L (USGS 1998).

3.4.4 Jurisdictional Waters of the United States

Section 404 of the CWA of 1977 authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. (Section 328.3[2] of the CWA) are those waters used in interstate or foreign commerce, subject to ebb and flow of tide, and all interstate waters including interstate wetlands. Waters of the U.S. are further defined as all other waters such as interstate lakes, rivers, streams, mudflats, sandflats, wetlands sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, or impoundments of water, tributaries of waters, and territorial seas. Wetlands are those areas inundated or saturated by surface or groundwater at a frequency and

duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (U.S. Army Corps of Engineers [USACE] 1987). Jurisdictional boundaries for these water resources are defined in the field as the ordinary high water mark, which is that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural lines impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Most waterways and ponds that are located in the project area are jurisdictional Waters of the U.S. However, a complete delineation is required to determine the exact acreage and linear measurements of these waters.

3.4.5 Floodplains

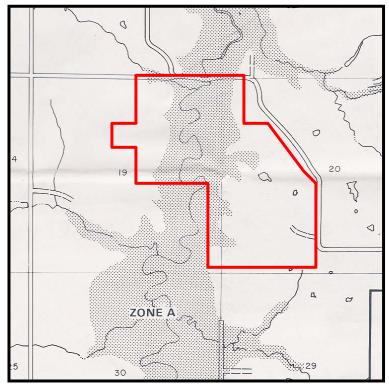
Under Federal regulations, all Federal agencies are directed to avoid, if possible, development and other activities in the 100-year base floodplain. Where the base floodplain cannot be avoided, special considerations and studies for new facilities and structures are needed. Federal agencies are required to 1) reduce the risk of flood loss; 2) minimize the impact of floods on human safety, health, and welfare; and 3) restore and preserve the natural and beneficial values served by floodplains in carrying out agency responsibility. The floodplain of Sandy Creek extends beyond its banks and includes approximately 30% of the proposed project area (Figure 3-2).

3.5 BIOLOGICAL RESOURCES

Biological resources include native plants and animals in the region around the proposed project site. The proposed project area is in the Texan biotic province of the United States. This region is dominated by oak-hickory forest, which typically includes post oak (*Quercus stellata*), blackjack oak (*Quercus marilandica*), and hickory (*Carya buckleyi*). The Texan province is a transition area between the forests of the East and the grasslands of the West and exhibits both habitat types. Dominants of the tallgrass portions of the province include *Agropyron smithii*, *Andropogon saccharoides*, *Andropogon scoparius*, *Stipa leucotricha*, and *Triodia pilosa*. Wildlife that may occur in this region historically includes diverse types of species that inhabit the various habitat of the area (Blair 1950).

3.5.1 Vegetation

Vegetation within the project area is typical of the region. A 20-acre portion of the property at the main entrance has been cleared and used as rangeland. As a result, this fenced portion is generally void of tree and shrubs, and is dominated by natural grasses. Flat portions of the property have also been cleared for rangeland activities. The majority of the project area, however, is undisturbed and is dominated by post oaks and blackjacks, among which occasional stands of juniper are interspersed. Juniper densities are greater on the bottomland portions in the southeast section of the property, and may be considered dominant in those areas.



Proposed project area is outlined in red. Floodplain areas are shaded.

FIGURE 3-2 FEMA FLOODPLAIN MAP FOR PROJECT AND SURROUNDING AREAS

3.5.2 Wildlife

Several species of wildlife noted during the April 2002 site visit included the grasshopper sparrow (Ammodramus savannarum) and other sparrows, American crow (Corvus brachyrhynchos), northern cardinal (Cardinalis cardinalis), blue-gray gnatcatcher (Polioptila caerulea), scissortail flycatcher (Tyrannus forficatus), black vulture (Coragyps atratus), turkey vulture (Cathartes aura), eastern bluebird (Sialia sialis), three-toed box turtle (Terrapene Carolina triunguis), opossum (Didelphis virginiana), armadillo (Dasypus novemcinctus), an unidentified aquatic snake, American beaver (Castor canadensis), wood duck (Aix sponsa), American coot (Fulica americana), and white-tailed deer (Odocoileus virginianus).

3.5.3 Aquatic Species

Sandy Creek traverses the northern section of the property. Other small drainages have created three ponds on the property, one of which supports a diverse community of aquatic wildlife.

Fish sampling was not conducted, but most species that occur in the Canadian River may potentially be present in Sandy Creek, as the creek is a major tributary of the river.

The beaver pond, which is located on the east-central portion of the property, has been impacted by natural wildlife behavior of keystone species for decades. The pond supports turtles, birds, invertebrates, and other wildlife that require permanent aquatic habitat for feeding and nesting opportunities.

3.5.4 Threatened and Endangered Species

The Endangered Species Act (ESA) [16 USC 1531 et. Seq.] of 1973, as amended, was enacted to provide a program for the preservation of endangered and threatened species and to provide protection for the ecosystems upon which these species depend for their survival. All Federal agencies are required to implement protection programs for designated species and to use their authorities to further the purposes of the Act. Responsibility for the identification of a threatened or endangered species and development of any potential recovery plan lies with the Secretary of the Interior and the Secretary of Commerce. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) are the primary agencies responsible for implementing the ESA. The USFWS is responsible for birds and terrestrial and freshwater species, while the NMFS is responsible for non-bird marine species. The Oklahoma Natural Heritage Inventory (ONHI) provides information regarding the state's threatened endangered species, while the Oklahoma Department of Wildlife Conservation (ODWC) maintains the regulatory authority.

An endangered species is a species in danger of extinction throughout all or a significant portion of its range. A threatened species is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Proposed species are those that have been formally submitted to Congress for official listing as threatened or endangered. In addition, the USFWS has identified species that are candidates for listing as a result of identified threats to their continued existence. The candidate (C) designation includes those species for which the USFWS has sufficient information on hand to support proposals to list as endangered or threatened under the ESA. However, proposed rules for this listing have not yet been issued because such actions are precluded at present by other listing activity.

Only three Federally- or state-listed threatened and endangered species occur in Pontotoc County. A list of Federally-and state-listed species as provided by USFWS and ONHI can be found in Table 3-1. Also included on this table are species of concern that occur in Pontotoc County.

The interior least tern prefers open, gravelly areas and sandpits along rivers for nesting and foraging. These terns have been known to nest on manmade structures, such as buildings with flat roofs. Although habitat may potentially occur along certain riparian areas of the Canadian River, none exists within the project area.

The piping plover is a small shorebird found on lakeshores, river sand bars, and ocean coasts. Although some portions of Sandy Creek include sandy banks, the plover would only occur in the

area for brief periods of time as a migrant. Further, the plover generally prefers flatter areas. Because of the rugged terrain in the project area, no plovers are expected to occur here at any time.

The Arkansas River shiner is a small, robust minnow. The shiner usually inhabits the main channels of wide, shallow, sandy-bottomed rivers and larger streams of the Arkansas River basin. Recurrent flooding is important in maintaining their habitat and also helps them maintain a competitive edge over non-native aquatic species.

ODWC COMMON NAME SCIENTIFIC NAME USFWS ARKANSAS RIVER SHINER NOTROPIS GIRARDI THREATENED THREATENED INTERIOR LEAST TERN STERNA ANTILLARUM ENDANGERED **ENDANGERED** PIPING PLOVER CHARADRIUS MELODUS ENDANGERED, **THREATENED** OKLAHOMA CAVE AMPHIPOD SS2 ALLOCRANGONYX PELLUDICUS **ALLIGATOR SNAPPING MACROCLEMYS** CS, SS2 TURTLE **TEMMINCKII** BACHMAN'S SPARROW CS, SS2 AIMOPHILA AESTIVALIS

TABLE 3-1 THREATENED AND ENDANGERED SPECIES OF PONTOTOC COUNTY, OK

TABLE KEY

TEXAS HORNED LIZARD

PHRYNOSOMA CORNUTUM

According to an ONHI biologist, both of these species are highly mobile, and the reporting of documented occurrences is likely under-representative of their actual presence in the region. Although water in Sandy Creek was not sampled, it is possible that the shiner occupies the stream, as preferred habitat was noted to exist. No evidence of the Federally-listed threatened or endangered species or species of concern was observed during the April 2002 site visit.

3.6 NOISE

Noise is generally described as unwanted sound, which can be based either on objective effects (hearing loss, damage to structures etc.) or subjective judgments (community annoyance). Measurement and perception of sound involves two basic physical characteristics: amplitude and frequency. Amplitude is a measure of the strength of the sound and is directly measured in terms of the pressure of a sound wave. Because sound pressure varies in time, various types of pressure averages are usually used. Frequency, commonly perceived as pitch, is the number of times per second the sound causes air molecules to oscillate. Frequency is measured in units of

CS, SS2

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CS – Closed Season, per state game regulations. No one may collect this species because no open season in permitted.

SS2 – No official state status, but a watch list species monitored by ODWC. More information is needed to determine whether species is declining or improving.

cycles per second, or Hertz (Hz). Sound is usually represented on a logarithmic scale with a unit called the decibel (dB). Sound on the decibel scale is referred to as a sound level. The threshold of human hearing is approximately 0 dB, and the threshold of discomfort or pain is around 120 dB.

The proposed project area is located away from noise-sensitive sites such as schools, churches, hospitals, etc. The ambient noise environment within the general area is typical of rural areas, with projected noise levels ranging from about 35 to 55 average-weighted decibels (dBA) day/night noise level (Ldn). Current noise in this area is faintly generated by occasional activity associated with the Ada Municipal Airport and the Burlington Northern Railroad; both are located within approximately 1.5 miles from the project area.

3.7 CULTURAL RESOURCES

Historic and archaeological resources are nonrenewable resources whose values may be easily diminished by physical disturbances. These resources are those items, places, or events considered important to a culture or community for reasons of history, tradition, religion, or science. The cultural history of the project area is long and varied. The following chronology summarizes the human habitation of south central Oklahoma.

The cultural history of south central Oklahoma is generally divided into five major time periods: Paleo-Indian (roughly 25,000-5000 B.C.), Archaic (5000 B.C. to A.D. 1), Woodland (A.D. 1-1000), Village (A.D. 1000-1500), and Historic (A.D. 1500 to present). The prehistoric periods are principally defined by the presence of diagnostic projectile points and other technologies, but are intended to delineate change in socio-cultural patterns. Prehistoric cultures in south central Oklahoma appeared to change significantly from a hunter-gatherer lifestyle in the Paleo-Indian and Archaic periods to a more sedentary agricultural lifestyle in the Woodland and Village periods. The area was close to territories inhabited by the Mississippian cultures to the east, and the residents may have been influenced by those cultures.

Paleo-Indian Period

The currently established chronology for the migration of humans across the Bering Strait to North and South America is set between 30,000 to 40,000 B.P. People did not travel to the southern half of the North American continent until about 12,000 B.P. (Gilbert and Brooks 2000). However, recent discoveries have questioned these dates, including one in Oklahoma. The Burnham site in Woods County, Oklahoma contained the remains of an ancient bison and cultural material that dated to between 28,000 and 34,000 B.P (Gilbert and Brooks 2000:11; Okeene, Oklahoma 2002). This tentative information contributed to growing evidence that humans inhabited the area for much longer than originally thought. More recent Paleo-Indians are known for big game hunting. The Clovis people hunted mammoth as well as other large game with fluted spears until 10,000 B.P. Several Clovis sites have been found in Oklahoma, including the Cooperton and Domebo sites in southwest Oklahoma (Gilbert and Brooks 2000). The Folsom cultural phase replaced the Clovis culture as the mammoth became extinct at 10,000 B.P. Increased evidence of bison hunting appeared in the archaeological record, along with a

different style of spear point. The oldest painted object yet found was discovered at a Folsom period bison kill site, the Cooper site in northwest Oklahoma (Gilbert and Brooks 2000:27; Oklahoma Museum of Natural History 2002). People living in the mixed woodland/plains area of eastern Oklahoma about 9,000 B.P. were members of the Dalton culture, who hunted deer instead of bison, collected large quantities of edible plants, and lived in larger collective groups (Gilbert and Brooks 2000:28; Oklahoma Museum of Natural History 2002).

Archaic Period

The Archaic period is a long time span marked by a change in climate in Oklahoma and is characterized by hunting and gathering societies. The period is noted for changes in the style of projectile points and tools and the introduction of grinding implements and ground-stone ornaments. This indicates a gradually increasing population that utilized abundant plant and animal resources of environments similar to those of modern times. The primary hunting system during the Archaic was the use of a spearthrower or atlatl. Climatic patterns surely vacillated during the Archaic, but were generally warmer than the Paleo-Indian period, with extended periods of drought. The Calf Creek cultural group, who were very adept at making large thin spear points, was located in south central Oklahoma during this time. The Calf Creek people were mobile, and lived in small temporary camps with good views of the landscape (Gilbert and Brooks 2000:35). Archaeological evidence suggests four groups of Calf Creek people living in east central, south central, north central and western Oklahoma. The Primrose and Stillman Pit sites in Murray County contain Frisco chert, originally located near Ada, Oklahoma, that was collected and brought west to be heat-treated and formed into Calf Creek points (Oklahoma Archeological Survey 2002a).

Woodland

Evidence of a more sedentary lifestyle and early farming techniques appeared about A.D. 1. Early farmers lived in semi-permanent housing made of vertical poles and thatch, and contained limestone hearths and storage pits. Seasonal crops were raised and harvested nearby, including sunflower, native squash, may grass, marsh elder, goosefoot, and pigweed. The first villagers were located in the northeast area of Oklahoma, the Ouachita Mountains, and the Canadian and Washita Rivers in central and western Oklahoma (Gilbert and Brooks 2000). Pottery was developed at this time, with early forms replicating skin bags and baskets. Woodworking tools and farming implements were also more prevalent, including axes, adzes, celts, digging sticks, and hoes. The locations of settlements depended on access to both woodland and prairie, with a good source of water and loose soil.

Village

With the introduction of corn, beans, and tropical squash from the south around 1000 A.D., the population of the early farmers increased, and more areas were inhabited as a result. Villages were formed in the plains areas and valleys of the Arkansas, Canadian, Washita, and Red Rivers. In addition to growing traditional native foods and the newly introduced crops, the Plains Villagers hunted deer, buffalo, elk, antelope, wolf, beaver, badger, rabbit, turkeys, ducks, and fish. The bow and arrow was developed, along with traps, snares, and deadfalls. A typical

village was comprised of 70 to 100 people living in five to 20 houses. Houses were square or rectangular, about 15 by 20 feet, and were made of upright posts supporting a thatch roof and wattle and daub walls. Storage pits that were larger and deeper than those used by early farmers were found in the Plains Villages. Cemeteries were located near the villages.

South central Oklahoma was the location of the Redbed Variant Village Complex, and more specifically, the Paoli and Washita River phases. The Paoli people inhabited the Washita and Canadian Rivers from A.D. 900 to 1250, grew corn, beans, and squash as well as marshelder and tobacco. Rectangular houses were common, and the pottery was cordmarked and grit tempered. Some pottery had flat bases for grain storage. Dart points became more common in the early Panoli phase, and side and corner notched arrow points were also increasingly utilized in the area (Oklahoma Archeological Survey 2002b).

Environmental and cultural changes were seen in the archaeological record about A.D. 1250, and the resulting cultural traits were called the Washita River phase. The population of the area between A.D. 1250 and 1450 increased, with a different style of house, a move from grit to shell as pottery temper, increased bison hunting, and a change from corner notched arrow points to side and un-notched arrow points. Trade with the Caddoan villages to the east and Puebloan villages to the west increased significantly (Oklahoma Archeological Survey 2002c). By the time the Spanish explorers journeyed through the area, the Plains Villages were largely abandoned (Oklahoma Archeological Survey 2002d). Those that remained in the area became known as the Wichita.

Historic

The increasingly dry environmental changes that began in A.D. 1250 continued through the next three centuries, and farming became increasing unreliable. The people in south central Oklahoma switched to hunting exclusively, and radically changed their lifestyle to accommodate the change. Permanent dwellings were abandoned and grass dwellings and tipis replaced them (Gilbert and Brooks 2000:91). Horses were reintroduced around A.D. 1700 by the Spanish, and several tribes moved in and out of the area. The Osage and Quapaw settled in Oklahoma in the late 18th century, but had much of their lands taken by the U.S. government and given to the Choctaw, Chickasaw, Cherokee, Creek, and Seminole, who were forced from their lands by the European expansion. They would form and govern their own nations until Oklahoma became a state in 1907. Oil was discovered in Oklahoma, and several land runs between 1889 and 1895 brought European Americans to the area in large numbers. Large numbers of African Americans also came to the area, first as slaves, and later during the oil boom (State of Oklahoma 2002). Pontotoc County was also created in 1907 from part of the Chickasaw Nation (Pontotoc County Historical and Genealogical Society 2002). Ada, founded in 1893, became the county seat. It was home to both the Chickasaw and European ranchers.

3.8 AESTHETIC RESOURCES

Aesthetic resources consist of the natural and manmade landscape features that appear indigenous to the area and give a particular environment its visual characteristics. The current visual characteristics of the general project area consist of mostly undisturbed hilly postoak-

blackjack forest with stands of juniper and other trees. Portions of the property with steep elevation changes are rugged in some places, with outcrops of limestone. These rugged areas are typical of the northwest and southwest corners of the property. Areas just east of Sandy Creek are flat grasslands as a result of modifications for rangeland usage. This is especially evident in the northeastern portion of the property.

3.9 SOLID AND HAZARDOUS WASTE

There is no known or suspected toxic and/or hazardous material contamination within the proposed project area. Additionally, there are no other known historic land uses within the project area (such as industrial uses) that might have resulted in toxic or hazardous material contamination of the underlying soil and/or groundwater resources.

3.10 SOCIOECONOMIC DATA

The city of Ada is the largest city in Pontotoc County. The largest employers in the city are of the health, manufacturing, and industrial/construction industries.

3.10.1 Population

According to the 2000 data compiled by the U.S. Census Bureau, the population of the city of Ada, OK was 15,691. Of these, 11,580 (73.8%) were white, 549 (3.5%) were black, 2,369 (15.1%) were Native American, and 1,193 (7.6%) were of other races (Oklahoma Department of Commerce 2001).

3.10.2 Employment and Income

The industry sectors of Pontotoc County that employ the most workers are manufacturing and health care. Of the 11,549 workers in the county, 2,257 are employed by a manufacturing firm, 2,254 are employed by a health care or social assistance provider, and 1,899 are employed by firms in the retail sector (U.S. Census Bureau 1997).

The median household income for Pontotoc County, based on 1997 model estimates, is \$25,859. Based on the same model, approximately 21% of the population and 30% of children in the county live below the poverty level. These averages are less desirable than state figures, which estimate median income of \$30,002 and 16% of the state population and 24% of children in the state below poverty level (Oklahoma Department of Commerce 2001).

4.0 ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

An environmental consequence or impact is defined as a modification in the existing environment brought about by mission and support activities. Impacts can be beneficial or adverse, a primary result of an action (direct) or a secondary result (indirect), and can be permanent or long-lasting (long-term) or of short duration (short-term). Impacts can vary in degree from a slightly noticeable change to a total change in the environment.

Short-term impacts would occur at the site of the proposed construction during and immediately after the construction of the proposed law enforcement training facilities. For this project, short-term impacts are defined as those tied to the first two years following project implementation, whereas long-term impacts are those lasting more than two years.

Potential impacts for this project were classified at one of three levels: significant, insignificant (or negligible), and no impact. Significant impacts (as defined in CEQ guidelines 40 CFR 1500-1508) are effects that are most substantial, and therefore should receive the greatest attention in the decision-making process. Insignificant impacts would be those impacts that result in changes to the existing environment that could not be easily detected. No-impact actions would not alter the existing environment. In the following discussions, impacts are considered adverse unless identified as beneficial.

Potential environmental consequences to each resource section include the following subcategories:

- Impacts. The level and duration of impacts that would occur as a result of the Proposed Action and the No-Action Alternative.
- Mitigation. Mitigation measures that could be applied to avoid or further reduce adverse impacts. Mitigation is discussed in Chapter 5.0

Cumulative impacts and irreversible and irretrievable commitment of resources are discussed in separate sections. Cumulative impacts are those which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable actions, regardless of who is responsible for such actions. Irreversible and irretrievable impacts are permanent reductions or losses of resources that, once lost, cannot be regained.

This section of the EA will discuss only those environmental factors that would be impacted by the Proposed Action or the No-Action Alternative. Table 4-1 presents a comparison of the potential impacts by each area of concern.

TABLE 4-1 COMPARISON OF POTENTIAL IMPACTS

Area of Impact		Proposed Action	No Action
Air Resources	ST:	Insignificant	No Impact
	LT:	Insignificant	No Impact
Land Use	ST:	Insignificant	No Impact
	LT:	Insignificant	No Impact
Geological Resources	ST:	Insignificant	No Impact
	LT:	No Impact	No Impact
Water Resources	ST:	Insignificant	No Impact
	LT:	Insignificant	No Impact
Biological Resources	ST:	Insignificant	No Impact
	LT:	Insignificant	No Impact
Noise Resources	ST:	Insignificant	No Impact
	LT:	No Impact	No Impact
Cultural Resources	ST:	Insignificant	No Impact
	LT:	No Impact	No Impact
Aesthetic Resources	ST:	Insignificant	No Impact
	LT:	Insignificant	No Impact
Solid/Hazardous Waste	ST:	Insignificant	No Impact
	LT:	Insignificant	No Impact
Socioeconomic	ST:	Beneficial	Insignificant
	LT:	Beneficial	Insignificant

Table Key

ST= Short-term Impact.

LT=Long-term Impact.

Beneficial=Impact would be favorable, producing an overall benefit.

Insignificant=Perceptible, but not significant impacts.

Significant=Potential impact which requires concern.

4.1 **AIR RESOURCES**

4.1.1 Proposed Action

Under the Proposed Action, exhaust pollutants would be created from on-site heavy equipment and vehicles bringing workers and building materials to the site. Diesel-powered heavy equipment would be used during construction of the law enforcement training facilities. Additional equipment which could be used at the project site includes a compressor for handoperated tools, forklifts for moving materials, ready mix trucks for hauling and pouring concrete, and trucks to deliver construction materials. It is assumed that several pieces of heavy equipment could be used simultaneously during the construction phase.

Such increases or impacts on ambient air quality during the construction/installation phase would be expected to be short-term and insignificant, and can be reduced further through the use of standard dust control techniques, including watering of the construction site.

A fleet of approximately 10 - 20 vehicles will be maintained at the facility; however a limited number of vehicles (4 - 8) may use the driving courses at any one time, and this marginal increase is not expected to significantly impact vehicle emissions within the general project area. Egypt Road, which borders the proposed site on the north and east, is a moderately traveled rural road, and it is not anticipated that the proposed project will increase the measurable emissions associated with the current levels. Additionally, on-site vehicle maintenance will be preformed to ensure minimal emission levels. Only insignificant long-term impacts would be expected to occur from the implementation of the Proposed Action.

The Proposed Action would not require any permitting action and would not create any air emissions that would jeopardize the Federal attainment status of the Air Quality Region, or cause an exceedance in the allowable Prevention of Significant Deterioration increment for the region. Additionally, any emissions created by the Proposed Action would be within conformance of the State Implementation Plan.

4.1.2 No-Action Alternative

Under this alternative, there would be no short- or long-term impacts on air resources.

4.2 LAND USE

4.2.1 Proposed Action

Land use would change for the proposed project area from undeveloped agricultural/rangeland to a developed law enforcement training facility. Many of the natural areas of the site will not be impacted by either the construction or the operation of the proposed facility. All areas along the boundaries of the facility will be left undisturbed as a buffer between the proposed facility and neighboring properties. Land use impacts will be greater during the construction phase of the project, however, these will be short-term. Following construction, all those areas not utilized for operation of the facility will either be replanted or allowed to return to their natural state. Traffic in the vicinity may increase slightly with the addition of law enforcement training to the center, but these increases would be insignificant, and would likely be unnoticeable. The majority of the 356 acres set aside for the proposed site will either remain undisturbed or will be revegetated to its previous setting. Therefore, both short- and long-term impacts on land use would be insignificant.

4.2.2 No-Action Alternative

Under the No-Action Alternative, baseline conditions would not change. No construction of the law enforcement training facility would occur and, therefore, no impacts on land use would result from the No-Action Alternative.

4.3 GEOLOGICAL RESOURCES

4.3.1 Proposed Action

It is not likely that geologic hazards such as seismic events, landslides, subsidence, or increased flooding would result from implementation of the Proposed Action. Conversely, the Proposed Action is not likely to be impacted by any geologic hazard in the general project area.

Site development will involve grading work along with cut and fill. To assist in offsetting environmental impacts from the grading work, an Erosion and Sediment Control Plan along with a SWPPP will be prepared and implemented for the entire site. Disturbances will be stabilized through replanting of vegetation during building and roadway construction. Due to the emphasis placed on minimization efforts, impacts from construction activities are expected to be negligible and short-term. In addition to the SWPPP, once construction has been completed, all areas not covered by impervious surfaces will be reseeded to prevent any long-term significant impacts on geological resources.

During the construction phase, the probability of soil contamination from on-site fuel systems exists, although it is not likely. The potential impact of such spills would be reduced with the use of secondary containment and would be subject to complete cleanup under the state's guidelines.

Additionally, any waste material generated during construction will be disposed of at an approved waste disposal site. Long-term impacts on geological resources from the implementation of the Proposed Action are not anticipated.

4.3.2 No-Action Alternative

No impact on topography or physiography would be expected from the No-Action Alternative. It is not likely that geologic hazards such as seismic events, landslides, subsidence or increased flooding would be impacted under the No-Action Alternative.

There would be no impact on soil, no possibility of contamination from construction-related activities, and no loss of prime farmland soil or soil of statewide importance. The No-Action Alternative would have no impact on any geologic resource.

4.4 WATER RESOURCES

4.4.1 Proposed Action

Water supply and wastewater disposal for the proposed law enforcement facility will be provided by the City of Ada. The proposed facility will be tied into existing water and sewer lines located along Egypt Road. Therefore, impacts on groundwater quality or quantity are not expected from either the construction or operation of the proposed facility.

Under the current design for the construction of the driver-training course, two low-water crossings will be utilized along an inland drainage area east of Sandy Creek. The low-water crossings would be a series of pipe culverts with sloping concrete walls and a concrete deck. The culverts and deck elevation would be designed to pass the 2- and 10-year storm events. The 25-, 50-, and 100-year events would overtop the crossing and flow normally. Adjustments would be made in channel width and deck height to ensure a less than 1-foot raise in the 100-year floodplain elevation at any point either upstream or downstream of the low-water crossing sites.

A double span bridge will be used to span Sandy Creek. For this construction, some fill would be placed within the creek overbanks and a set of piers would be required in the creek channel. Other than what is required for the construction of the piers, there would be no anticipated modifications to the channel. The bridge would be designed to ensure a less than 1-foot raise in 100-year flood elevation either upstream or downstream of the bridge site. The low beam of the bridge deck would be placed above the 100-year flood elevation.

In the event of a very severe storm, small quantities of sediment could be carried from the site to surface waters; however this would be a short-term and insignificant impact. Stabilization of any disturbed soil through landscaping at the conclusion of the construction would eliminate the potential for sediments to be carried into stormwater runoff.

During construction, there will be short-term impacts on Sandy Creek; however, through the use of stabilization and erosion control methods, these impacts can be minimized. As the total area disturbed for this project is greater than five acres, a SWPPP has been included as Appendix E. Once the project construction has been completed, no deterioration of natural drainages, disruption of drainage patterns, or degradation of surface water quality is expected from the operation of the law enforcement training facility.

Additionally, the amount of impervious surface area for the planned facility is approximately 33.4 acres or less than 10 percent of the entire 356-acre site. Because of the low percentage of impervious cover coupled with the erosion minimization efforts and revegetation of disturbed areas, the operation of the proposed training facilities is expected to have only insignificant short- and long-term impacts on surface water resources

4.4.2 No-Action Alternative

No change in baseline conditions would be expected from the No-Action Alternative. Therefore, no impacts would occur as a result of this alternative.

4.5 BIOLOGICAL RESOURCES

4.5.1 Proposed Action

A site visit to the location of the proposed project was made in April 2002. At that time, a field survey was conducted by two field biologists and four archaeologists from Ecological Communications Corporation (EComm) and 100 percent of the proposed project area was

covered. Prior to the site reconnaissance, all available project-related literature was reviewed, and information from the Oklahoma DEQ, ONHI, ODWC, and the USFWS was obtained regarding Federally and State-listed threatened and endangered species or special species of concern for Pontotoc County.

4.5.1.1 Vegetation

Under the Proposed Action, the total area impacted by the construction would be approximately 70 acres. Bivouac and staging areas would be selected prior to the start of any construction and would be located in previously disturbed areas in order to avoid or minimize any further impacts on vegetation. During construction, standard erosion and sediment control measures will be followed to avoid adverse impacts on the vegetation areas remaining undisturbed. As previously noted, the amount of impervious surface area for the planned facility is less than 10 percent (33.4 acres) of the entire site (356 acres). Following construction, where possible, all disturbed areas that are not used for training purposes, covered by impervious surfaces, or utilized for landscaping will be reseeded or allowed to revegetate naturally. Therefore, the construction and implementation of the Proposed Action is expected to have insignificant short- and long-term impacts.

4.5.1.2 Fish and Wildlife

Insignificant impacts on fish or other aquatic species may occur during the construction phase of the Proposed Action. These impacts will be minimized through the use of erosion control measures and are expected to be short-term in duration. No long-term impacts on these resources are expected from the operation of the proposed law enforcement training facility.

The wildlife species likely to be impacted from the Proposed Action would be small mammals, reptiles, and birds. The impacts on resources such as foraging and nesting habitat would be insignificant due to the amount of actual area disturbed by the Proposed Action and the placement of the proposed law enforcement training facilities away from prime habitat areas, such as the beaver pond and habitat located along the majority of Sandy Creek. Additionally, due to the ability of any wildlife species to relocate to adjacent habitats, these impacts would be temporary and short-term. Terrestrial wildlife movements would not be impeded by the presence of law enforcement training facilities, and the proposed construction activities would not have a significant effect on wildlife movement, as wildlife would be able to utilize the area of the proposed construction during dawn, twilight, and nighttime hours. Therefore, both short and long-term impacts on wildlife species are expected to be insignificant.

4.5.1.3 Threatened and Endangered Species

Under the Endangered Species Act, formal consultation with the USFWS is required for any action that may affect Federally-listed species. Additionally, Federal agencies are required to ensure that any action authorized, funded, or carried out by such agencies would not be likely to jeopardize the continued existence of any threatened or endangered species. Copies of the consultation letters with the USFWS and the ODWC are presented in Appendix C.

No Federally-listed threatened, endangered or proposed species were observed during the survey of the proposed project area; therefore, there would be no direct impacts on Federally-listed threatened or endangered species. Specific habitat requirements for the listed species are not met in the immediate area of the Proposed Action. No designated critical habitat for Federally-listed species occurs within the area of the Proposed Action.

Based on the information provided in Section 3.5.4, their preferred habitats, and lack of evidence that these species occur within the project area, it would be unlikely that any Federally-listed threatened or endangered species would be found within the proposed project area. Therefore, the Proposed Action would have no impact on Federally-listed threatened or endangered species.

4.5.1.4 Wetlands and Floodplains

As noted in Section 3.4.4, the majority of the waterways and ponds located in the project area appear to be jurisdictional Waters of the U.S. Prior to construction activities, a wetland delineation will be conducted and coordinated with the U.S. Army Corps of Engineers to ensure compliance with the requirements contained in Section 404 of the Clean Water Act. Through this coordination, only insignificant short- and long-term impacts are anticipated.

Additionally, since approximately 30% of the proposed project area (as noted previously in Figure 3-2) is located within the 100-year floodplain, development will be designed to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains. These activities will be thoroughly coordinated with the Federal Emergency Management Agency to ensure compliance with floodplain regulations. Through this coordination, only insignificant short- and long-term impacts are anticipated.

4.5.2 No-Action Alternative

Baseline conditions would not change under the No-Action Alternative. Short- and long-term impacts from the No-Action alternative would have no impact on biological resources.

4.6 NOISE

Noise naturally dissipates by atmospheric attenuation as it travels through the air. Some other factors that can affect the amount of attenuation are ground surface, foliage, topography, and humidity. For each doubling of distance from the source, the noise level can be expected to decrease by approximately six decibels (dB). This method is a conservative estimate of noise levels. A significant impact would be an increase in the ambient noise levels to a level of physical discomfort, or 120 A-weighted decibels (dBA).

4.6.1 Proposed Action

Temporary construction noise impacts vary markedly because the noise intensity of construction equipment ranges widely as a function of the equipment and its level of activity. Short-term construction noise impacts tend to occur in discrete phases dominated initially by large

earthmoving sources and later by hand-operated tools for finish construction. The noise produced by an assemblage of heavy equipment involved in urban, commercial, and industrial development typically ranges up to about 89 dBA at 50 feet from the source (USACE 1995).

In the vicinity of the proposed project, receptors are located well beyond these distances, with the closest receptor (housing) being over 800 feet away. Only short-term insignificant noise and traffic impacts are expected from the construction phase of the proposed project.

The operation of the facility will result in some permanent increase in noise levels for the area. Additional impacts on exterior noise can be reduced by the use of vegetation located along the boundaries of the property. Due to the mitigation measures incorporated into the planning of this facility, the long-term noise impacts would be considered to be insignificant for implementation of the Proposed Action.

Since the facility will be self-contained, traffic flow in and out of the site will be periodic and not daily. Officers will arrive during hours of low traffic counts and may either stay within the boundaries of the facility for the duration of their training or leave in the evening hours. Additionally, the facility may implement a curfew under certain training activities. The main entrance to the facility would be on the southern portion of the property from Egypt Road; thus, only a short portion of Egypt Road would be impacted. Therefore, impacts from the long-term operation of the facility are expected to be insignificant.

4.6.2 No-Action Alternative

No change in baseline conditions would be expected under the No-Action Alternative.

4.7 CULTURAL RESOURCES

A site visit to the location of the proposed project was made in April 2002. At that time, a 100% pedestrian field survey was conducted by four archaeologists from EComm, with assistance of an archaeologist from the USACE, Fort Worth District. Within the 356 acres of the Area of Potential Effect (APE), a total of 379 shovel tests were excavated during the cultural resources survey. About 135 shovel tests were placed along linear transects in the southern portion of the project area, and 224 shovel tests were located along linear transects and in clusters in the northern rectangular portion. Of those shovel tests, only two contained cultural material, which consisted only of small secondary and tertiary flakes, medium tan to off-white in color, from widely varying depths. An additional 20 shovel tests were placed near these two positive shovel tests, and one prehistoric archaeological site, Site 34PN266, was located and recorded.

Site 34PN266 is a prehistoric lithic scatter of unknown age. No ceramics, structures, features, or diagnostic material were observed. No variation in the landscape that would indicate subsurface material was observed. The site is semi-circular in shape and measures 110 m (E-W) by 70 m (N-S), and extends to a depth of at least 80 cm. It is located in the south central area of the northern portion of the property, just north of the drainage network on the southern side of the northern portion of the property, and several meters to the west of Sandy Creek. The site is located on a sloping floodplain in very sandy soil, with a drainage bordering the west, south, and

eastern portions of the site. Trees cover about 50 percent of the site area. A dirt track made by four-wheelers cuts across the drainage to the west, and clips the northwestern corner of the site. Flooding of the area is frequent.

Additionally, the recent debris located in the southern section of the property, consisting of a well, pumphouse, septic tank or cistern, and a scatter of building material and household items, indicate that the top of the hill was once occupied. The pumphouse was made of concrete block with a metal shed roof and wooden door, and contained rusted pumping equipment, food jars, coffee cans, beer cans, and paper trash. The septic tank or cistern was a rectangular box made of poured concrete with re-bar. More detailed descriptions of the survey and its findings are presented in a report submitted under separate cover (USACE 2002).

4.7.1 Proposed Action

The Proposed Action would disturb or destroy between 50% and 100% of site 34PN266. However, the soil containing the site is comprised of loose sand, with disturbances from frequent flooding. Artifacts have a tendency to move easily in sandy soil, especially soil that is inundated periodically with water. Such movement was indicated by the inconsistent depths at which cultural material was located in the shovel tests. Although there is ample evidence that the area was utilized in the prehistoric period, the soil disturbance from flooding and artifact movement in sandy soil indicates the potential for *in situ* subsurface cultural material is very poor. It is very likely that cultural contextual information, such as occupation surfaces, activity areas, features, or evidence of structures, have been heavily disturbed. For this reason the site does not have good research potential. It is not evaluated as significant, and may not be eligible for inclusion on the National Register of Historic Places (NRHP). A determination will be made by the Oklahoma State Historic Preservation Officer (SHPO).

4.7.2 No-Action Alternative

Under this alternative, no impacts would be made to any cultural resources within the APE.

4.8 **AESTHETIC RESOURCES**

4.8.1 Proposed Action

As noted in Section 3.8, the current visual characteristics of the general project area are mostly undisturbed hilly postoak-blackjack forests with stands of juniper and other trees. Portions of the property area with steep elevation changes are rugged in some places, with outcrops of limestone. No buildings or development are currently visible at the proposed site.

The Proposed Action would have insignificant impacts on aesthetic resources. A vegetation buffer will remain around the perimeter of the facility, as well as throughout the various courses. As previously noted, all disturbed areas will be replanted with grass or ground cover and additional landscaping will be incorporated to enhance the aesthetics of the facility.

Construction activities are considered insignificant as they would be short-term and would not have a permanent impact on the subject areas. Long-term impacts on aesthetic resources under the Proposed Action would be insignificant based on the revegetation and landscaping measures.

4.8.2 No-Action Alternative

Under the No-Action Alternative, no facilities would be constructed for law enforcement training in Ada. Baseline conditions would not change, therefore, there would be no impact associated with the No-Action alternative.

4.9 SOLID AND HAZARDOUS WASTE

4.9.1 Proposed Action

The Proposed Action would not affect solid and hazardous waste conditions within the project area. A potential hazard, however, may exist within the area during construction, as the presence of heavy machinery will increase during this time. The potential for an accidental spill of diesel fuel or other contaminants associated with construction machinery will increase. Safety precautions will be taken by construction crews to decrease the potential for a hazardous spill.

Solid waste generated by the operation of the training facility will be removed by a commercial hauler to an approved landfill. There will be no on-site disposal of materials. The only hazardous materials to be generated by the operation of the facility will be used motor oil and other automotive fluids such as antifreeze. These materials will be contained in the vehicle maintenance area and used in connection with vehicle repair and light maintenance.

Both the short- and long-term impacts on hazardous and solid waste from the operation of the facility are anticipated to be insignificant due to the adherence to local, state, and Federal standards.

4.9.2 No-Action Alternative

Under this alternative, there would be no short- or long-term impacts resulting from generation or management of hazardous or solid waste.

4.10 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

4.10.1 Socioeconomics of Proposed Action

The Proposed Action would provide direct and indirect economic benefits to area companies and employees as a result of construction activities, and through economic multiplier effects. The impacts on the socioeconomic environment in the region of influence (ROI) such as population, employment, income, and business sales would be beneficial but imperceptible. The construction would be performed by both military personnel deployed to the area for this project and private contractors. It would not be likely that additional hiring would occur within the local

area. Additionally, the Proposed Action would not induce permanent in- or out-migration to or from the ROI. Therefore, the overall area population would not be significantly impacted.

Direct expenditures associated with the proposed project would have a minimal impact on employment, income, and sales within the ROI. Although most labor and some materials would be brought into the local area, some expenditures are expected to occur within the ROI. A shortterm increase in local revenues for commercial establishments, trade centers, and retail sales will result from the purchase of supplies and equipment rental. Any potential impacts from construction activities would easily be absorbed into the broader economy of the ROI.

If the Proposed Action is carried out, DLEAs in Oklahoma would have a permanent location for law enforcement training exercises. The local economy would directly benefit from having the proposed facilities available to DLEAs in the state. Additionally, construction of the proposed facilities would benefit the state by assisting DLEAs in their mission to decrease drug trafficking, smuggling and associated crime. Therefore, implementation of the Proposed Action would result in overall beneficial impacts on the socioeconomic environment of the region.

4.10.2 Environmental Justice of Proposed Action

EO 12898 of 11 February 1994 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" provided that each U.S. Federal agency identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low income populations in the U.S.

The Proposed Action would be located in a sparsely populated area, with the nearest development being over 500 feet away from the proposed construction site. Furthermore, the proposed construction and operation of law enforcement training facilities at this location is not expected to be detrimental to the existing physical environment, including its aesthetic value. Therefore, there would be no disproportionately high or adverse impacts on minority or low-Under the definition of EO 12898, there would be no adverse income populations. environmental justice impacts.

4.10.3 No-Action Alternative

Under the No-Action Alternative, no permanent law enforcement training facilities would be constructed or available to DLEAs in the region, and DLEAs would continue law enforcement training exercises at whatever temporary facilities they could locate. The local economy would not benefit from having such facilities available to all of Oklahoma. The region would continue to experience current rates of impacts on law enforcement agencies and other socioeconomic factors in the area as a result of continued drug trafficking, smuggling, and crime. Selection of the No-Action Alternative would have an insignificant impact on environmental justice and socioeconomic resources in the ROI.

4.11 IRREVERSIBLE AND IRRETRIVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable commitments of resources would include a small amount of soil lost through wind and water erosion, a minor loss of small animal habitat due to construction activities, loss of materials, energy and manpower expended during construction of the project, and a temporary higher level of noise generated from the construction activities.

4.12 CUMULATIVE IMPACTS

The assessment of cumulative impacts is addressed in NEPA by its reference to interrelations of all components of the natural environment. The CEQ defined cumulative impacts as the incremental impact of multiple present and future actions with individually minor but collectively significant effects. Cumulative impacts can be concisely defined as the total effect of multiple land uses and developments, including their interrelationships, on the environment (Bain *et al.* 1986).

In order to evaluate cumulative effects, NEPA documents from previous Federal actions in the region were reviewed. Additional information was considered, including Census Bureau growth rates and any known projects planned for the reasonably foreseeable future. There are no additional known projects in the reasonably foreseeable future planned for this area by JTF-6 at this time. However, the unpredictable nature of drug trafficking, smuggling and associated crime could create the need for additional JTF-6 services in the future.

The analysis revealed that for geologic resources, air quality, water resources, cultural resources, biological resources (i.e., vegetation, wildlife habitat, and threatened and endangered species), and noise, past and proposed action areas would have insignificant cumulative impacts due to the temporary nature of construction activities. The cumulative impact on the socioeconomic environment would be beneficial.

The primary cumulative effect from past actions is the permanent loss of vegetation and associated wildlife habitat. The city of Ada, Oklahoma is the population center nearest the area of the proposed action, and the city may continue to grow under favorable economic conditions in the region. This metropolitan area has been the most significant factor contributing to long-term cumulative impacts (direct and indirect) in the region.

Growth in the region is likely to continue at a moderate rate. In the immediate vicinity of the proposed law enforcement training facility, there are large tracts of undeveloped lands. The area is primarily in private ownership. Based on the information available, there are no large-scale Federal or State projects planned for the reasonably foreseeable future in this region.

Counterdrug activities could increase as the area develops. Actions associated with Federal counterdrug activities have been (and will continue to be) subject to analysis under existing laws protecting the environment. The greatest cumulative impacts (both direct and indirect) resulting from the growth of the population in the region would be on soils, water supplies, air quality, land use, vegetation, and the socioeconomic environment. The cumulative impact on the quality

of life in the region could be significant and beneficial, however, if DLEAs are successful at curbing illegal drug trafficking.

If a FONSI is developed and implemented, the Proposed Action would result in the disturbance of approximately 70 acres of land. The No Action Alternative would result in no additional direct effects on the area's resources by JTF-6. DLEAs in state of Oklahoma, however, would not have a permanent location at which to conduct law enforcement training exercises, and DLEA efforts to curtail drug trafficking, smuggling, and associated crime would remain unchanged, or could be diminished as the area continues to grow.

5.0 ENVIRONMENTAL DESIGN MEASURES

This chapter describes environmental design measures that would be implemented as part of the Proposed Action to reduce or eliminate impacts from proposed law enforcement training facility construction. Due to the nature of the Proposed Action, construction impacts are expected to be short-term and insignificant. Mitigation measures are described below for those resources having a potential for impacts.

5.1 AIR QUALITY

Mitigation measures would include dust suppression methods to minimize airborne particulate matter that would be created during improvement and construction activities. Additionally, all construction equipment and vehicles would be required to be kept in good operating condition to minimize exhaust emissions. Standard construction practices would be used to control fugitive dust during the construction phases of the Proposed Action. During the operational phase of the project, training vehicles will be kept in good repair to minimize emissions.

5.2 WATER RESOURCES

Standard construction procedures would be implemented to minimize the potential for erosion and sedimentation during construction activities. All work would cease during heavy rains and would not resume until conditions are suitable for the movement of equipment and material. Storage or staging areas would be located at least one-quarter of a mile from intermittent streams or other permanent surface water bodies to reduce potential effects of accidental spills. Conservation measures would be implemented to preclude unnecessary waste of water supplies. Discharges of gray water and other wastes to drainages or other water courses/bodies would be prohibited. Portable latrines provided and maintained by licensed contractors would be used to the extent practicable during construction activities.

Additionally, mitigation measures such as the development of a SWPPP for stormwater runoff from construction activities will be required for this project, as the total areas of disturbance is greater than five acres. Five stormwater detention ponds will be installed and maintained in an effort to detain and filter runoff from the development area. Additional erosion control measures such as waterbars, gabions, haybales, and reseeding will be implemented during and after construction activities in accordance with the SWPPP.

5.3 BIOLOGICAL RESOURCES

Impacts on existing vegetation during construction activities would be minimized through avoidance where possible. Disturbed sites would be utilized to the maximum extent practicable for construction and operational support activities. Attempts to minimize loss of vegetation may include trimming vegetation adjacent to the building site rather than removing the entire plant and use of construction fencing to prevent accidental damage to vegetation that should not be disturbed. Additionally, all disturbed areas will be replanted with native grass or ground cover,

and disturbed areas not required for training or for landscaping at the facility will be allowed to revegetate naturally.

5.4 NOISE

As required by the Occupational Safety and Health Administration, earplugs will be worn by employees working in environments with continuous noise levels of eight hours per day above 90 dBA. Because of the increased noise sensitivity during quiet hours, time limits on on-site construction activities are warranted for grading and the use of heavy equipment.

During the construction phases, noise impacts are anticipated at local human receptors. On-site activities should be restricted to daylight hours on Monday through Saturday, except in emergency situations, and only maintenance on equipment permitted on Sundays. Additionally, all construction equipment should possess properly working mufflers and be kept in a proper state of tune to reduce backfires. Implementation of these measures will reduce noise impacts to an insignificant level.

5.5 CULTURAL RESOURCES

As noted in Section 4.7, the field survey identified a new archeological site, 34PN266, within the boundaries of the proposed project area. The SHPO will make the final determination of the site's eligibility for inclusion on the NRHP and the level of testing or mitigation required, if any. The project will not proceed until concurrence is obtained from the SHPO.

<u>Unanticipated Discovery of Human Remains</u>

If human remains are encountered at any place, whether on a cultural resource site or at any other place, work in the vicinity will cease immediately and the stipulations of NAGPRA will be implemented.

5.6 SOLID AND HAZARDOUS WASTE

With proper handling, storage, and/or disposal of hazardous and/or regulated materials there would be no significant adverse impact on onsite workers and neighboring flora and fauna. To minimize potential impacts from hazardous and regulated materials, all fuels, waste oils, and solvents would be collected and stored in tanks or drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein.

The refueling of machinery would be completed following accepted guidelines, and all vehicles would have drip pans during storage to contain minor spills and drips. Although it would be unlikely for a major spill to occur, any spill of five gallons or more would be contained immediately within an earthen dike, and the application of an absorbent (e.g. granular, pillow, sock, etc.) would be used to absorb and contain the spill. Any major spill of hazardous or

regulated substance would be reported immediately to JTF-6 environmental personnel or other appropriate on-site authority, who would in turn notify appropriate Federal and state agencies.

Additionally, all personnel would be briefed as to the correct procedures for preventing and responding to a spill. A Spill Prevention, Control, and Countermeasures Plan would be in place prior to the start of construction. Adoption and full implementation of the construction measures described above will reduce adverse hazardous/regulated substances impacts on insignificant levels.

All waste oil and solvents would be recycled if practicable. All non-recyclable hazardous and regulated wastes would be collected, characterized, labeled, stored, transported, and disposed of in accordance with all Federal, state, and local regulations, including proper waste manifesting procedures.

6.0 PUBLIC INVOLVEMENT

This chapter discusses consultation and coordination that occurred in the preparation of this document. This includes contacts made during development of the Proposed Action, elimination of alternatives, and writing of the EA. Formal and informal coordination has been conducted with the following agencies:

- U.S. Army Corps of Engineers (Fort Worth District);
- Joint Task Force Six (JTF-6);
- Council on Law Enforcement Education and Training (CLEET);
- Oklahoma Department of Wildlife Conservation;
- Oklahoma State Historic Preservation Office (SHPO);
- Oklahoma Archeological Survey, The University of Oklahoma;
- Oklahoma Conservation Commission;
- Oklahoma Department of Environmental Quality (DEQ);
- U.S. Fish and Wildlife Service (USFWS);
- Oklahoma Natural Heritage Inventory;
- U. S. Environmental Protection Agency, Region 6, and
- The Chickasaw Nation.

Letters of coordination and response letters can be found in Appendix C. The Draft EA was made available for public review. A copy of the public notice is located in Appendix D.

Dueft EA for Droposed Law Enforcement Training Escility, Ada Oblahama

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9.0 LIST OF ACRONYMS AND ABBREVIATIONS

AQD Air Quality Division AR Army Regulation

C Candidate

CEQ Council on Environmental Quality

CLEET Council on Law Enforcement Education and Training

CFR Code of Federal Regulations

CWA Clean Water Act

dB Decibel

dBA Average-weighted Decibels
DLEA Drug Law Enforcement Agency

DoD Department of Defense EA Environmental Assessment

EComm Ecological Communications Corporation

EO Executive Order

ESA Endangered Species Act

FONSI Finding of No Significant Impact

Hz Hertz

JTF-6 Joint Task Force Six
Ldn Day/Night Noise Level
METL Mission-essential Task List

NAAQS National Ambient Air Quality Standards

NAGPRA Native American Graves Protection and Repatriation Act

NDCS National Drug Control Strategy

NEPA National Environmental Protection Act NHPA National Historic Preservation Act NMFS National Marine Fisheries Service

NOI Notice of Intent

NRHP National Register of Historic Places

NWS National Weather Service

ODWC Oklahoma Department of Wildlife Conservation

ONHI Oklahoma Natural Heritage Inventory

ROI Region of Influence

SHPO State Historic Preservation Officer

SIP State Implementation Plan

U.S. United States
USC United States Code

USEPA U.S. Environmental Protection Agency USFWS United State Fish and Wildlife Service

USGS United States Geological Survey